

Contents

Foreword	<i>xiii</i>
About the Author	<i>xv</i>
About This Book	<i>xvii</i>
 Tutorial 1 Beginning VB .NET	<i>1</i>
 1.1 Programming, Visual Basic, and Everything	<i>3</i>
What Is VB .NET?	<i>4</i>
Creating Your First Program	<i>5</i>
Conclusion	<i>19</i>
Review Sheet	<i>21</i>
 1.2 Exploring Controls and Making Decisions	<i>23</i>
Exploring Controls	<i>23</i>
Responding to Events	<i>27</i>
The Top Ten Controls	<i>29</i>
Bringing It All Together	<i>38</i>
Making Decisions	<i>44</i>
Conclusion	<i>46</i>
Review Sheet	<i>49</i>
 1.3 Variables and the Coolest Code	<i>51</i>
Using Variables	<i>51</i>
Time for a Test	<i>56</i>
And Now, the Cool Stuff!	<i>57</i>
Conclusion	<i>67</i>
Review Sheet	<i>69</i>

1.4 Menus, Methods, Modules, and Multiple Forms	71
Expanding with Menus	71
Expanding with Forms	77
Expanding with Methods	81
Expanding with Functions	83
Methods, Modules, Mayhem—Oh My!	89
Conclusion	92
Review Sheet	93
1.5 Errors, Setup, and Going from Here	95
Handling the Errors	95
Distributing Your Program	100
FAQ	108
Where to Go from Here	111
Conclusion	113
Review Sheet	115
Tutorial 2 Doing Databases	117
2.1 Introducing Databases	119
What Are Databases?	120
Choices, Choices	122
Exploring Northwind	122
Doing the Data Bind	126
Conclusion	134
Review Sheet	136
2.2 Our Own Database and VB .NET	137
Creating Our Own Database	137
Adding Relationships	141
Binding to a Windows Form	145
Binding on the Web	154
Using the Wizards	159
Conclusion	161
Review Sheet	163

2.3 Doing It Completely in Code	165
Talking the Talk	165
Cheating at SQL	170
Accessing in Code	171
Our Completely-in-Code Program	172
Expanding with Relationships	181
Conclusion	186
Review Sheet	187
 2.4 SQL Server, Web Applications, Transactions...Oh My!	 189
Joining the Big Boys	189
Creating a Server Database	191
Creating a Transactional Database-Powered Web Application	200
And for My Next Trick...Transactions!	210
Conclusion	215
Review Sheet	217
 2.5 Designing Reports and Going from Here	 219
Reporting with Crystal	219
FAQ	232
Where to Go from Here	236
Conclusion	237
Review Sheet	139
 Tutorial 3 Working the Web	 241
 3.1 The ASP.NET Revolution	 243
How It All Works	244
Creating Your First Site	244
Getting Bigger and Better	248
The Greatest Controls Ever Sold	258
Conclusion	272
Review Sheet	273

3.2 Ten Top Code Snippets You Can't Live Without	277
The Top Ten List	277
Quiz Time	288
Conclusion	290
Review Sheet	291
3.3 Authentication, Tips, Distribution, and More	293
Securing Your Sites	293
Improving Your Site	303
Deployment	309
FAQ	311
Conclusion	315
Review Sheet	317
Tutorial 4 Going Mobile	319
4.1 Introducing the Mobile Internet Toolkit	321
How Does It Work?	322
Creating Our First Mobile Application	323
Exploring the Controls	330
I'm Playing Around	339
Conclusion	340
Review Sheet	341
4.2 Your Device, Filters, Images, Memory, and More	343
Finding Out about Your Device	343
A Word about Filters	348
Displaying Images, Using Filters	354
Do You Remember?	358
FAQ	360
Conclusion	363
Review Sheet	365

Tutorial 5 Using Objects	367
5.1 Why Objects Are Important	369
What Are Objects?	369
Starting Small	372
Adding Properties	376
Bettering Properties	378
Methods, Functions, Parameters—Oh My!	382
Events	383
Going Further	386
Conclusion	387
Review Sheet	389
5.2 Objects in Real Life, Class Libraries, and More	391
Creating a Customers Class	391
Adding a Test Project	397
Time for a Chat	401
Distributing Your DLL	404
FAQ	405
Conclusion	412
Review Sheet	413
Tutorial 6 Services Rendered	417
6.1 Introducing the World of Web Services	419
How It All Works	419
Creating a Web Service	422
Imagining the Possibilities	429
Passing Smart Data	430
The Top Five Distribution Tips	435
Deploying Your Web Service	437
FAQ	438
Where to Go from Here	440
Conclusion	441
Review Sheet	443

Tutorial 7 From VB6 to .NET	445
7.1 All The Changes, Quickly	447
What is .NET?	447
Introducing Visual Studio .NET	450
How Your Code Changes	456
They're Objects, Jim...	462
Getting It Out	471
Upgrading Your Existing Applications	472
Where to Go from Here	472
Conclusion	474
 Tutorial 8 Tips and Techniques	 475
8.1 Beginner Tips and Techniques	477
Making Your Form Transparent	478
Snapping to the Grid	478
Resizing Controls at Runtime	478
Adding Menus to Your Program	479
Changing Your Window State	479
Adding the With Keyword	479
Using Visual Inheritance	480
Typing the TODO: Statement	480
Setting a Site Homepage	480
Adding Smart Navigation to Web Forms	481
Changing the Tab Order	481
Generating Random Numbers	481
Exiting Your Code	482
Customizing the Cursor	482
Using Special Code Characters	482
Creating a Number-Only Text Box	483
Reversing a String	484
Rounding a Number	484
Replacing Text the Easy Way	484
Listing and Setting Fonts	485
Trimming a String	485
Ending Your Application	486
Retrieving a Number Using Val	486
Resetting the Windows	486
Capitalizing Your Characters	486

8.2 Intermediate Tips and Techniques487

Finding the Application Directory	488
Formatting Dates	488
Exploring the Command Window	490
Creating an MDI Application	490
Adding Toolbars	491
Reading an XML File	492
Using DataSets and XML	494
Creating Your Own Icons	495
Reading and Writing to Files	495
Finding the Last Day of the Month	496
Using the Handles Keyword	497
Converting Text to Proper Case	498
Storing to the Clipboard	498
Working with Files	498
Highlighting Form Errors	499
Using the IIF Function	500
Validating an Email Address	500
Resetting a Form	503

8.3 Advanced Tips and Techniques505

Introducing the VS.NET Command Prompt	506
Using Keywords in Your Code	506
Declaring Static Variables	507
Checking for a Leap Year	507
Creating a GUID	507
Generating OLE DB Strings with Ease	508
Checking for a Whole Number	509
Read the Command Line Parameters	509
Getting Special Folder Locations	510
Checking for a Previous Instance	510
Saving to the Registry	511
Using COM Objects	512
Turning a Recordset into a DataSet	513
Exposing .NET to the COM World	513
Storing Often-Used Code	514
Saving Time with Macros	514
Using Simple Encryption	514
Encrypting a File	516
Generating Memorable Passwords	519
Printing from Your Program	520

Creating and Sorting Arrays	523
Using the Special Array Functions	526
Collections in .NET	527
Finding MTS and MSMQ	528
Fine-Tuning Your ASP.NET Applications	529
 Appendixes	 531
Appendix A Installing Visual Studio .NET	533
Appendix B Project Defaults	536
Appendix C Standard Naming Conventions	542
Appendix D Windows Form Controls	545
Appendix E VB .NET Data Types	548
Appendix F SQL Server Data Types	550
Index	553